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Preliminary Randomized Controlled Trial of Prolotherapy and Occlusal Braces for Managing Temporomandibular Joint Disorders

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Abstract

This preliminary randomized controlled trial (RCT) aims to assess the e cacy of combining prolotherapy with occlusal braces in managing temporomandibular joint (TMJ) disorders. Temporomandibular joint dysfunction (TMD) often results in pain, limited movement, and other functional issues, and traditional treatments have varied in e ectiveness. This study investigates whether a combined approach of prolotherapy and occlusal braces o ers enhanced relief compared to either treatment alone or a control. In this single-center, randomized controlled trial, 60 participants with diagnosed TMJ disorders were randomly assigned to one of three groups: (1) prolotherapy plus occlusal braces, (2) prolotherapy alone, (3) occlusal braces alone, or (4) a control group receiving standard care. Prolotherapy involved a series of injections aimed at stimulating tissue repair, while occlusal braces were used to improve bite alignment and reduce joint strain. Participants were evaluated at baseline, 6 weeks, and 12 weeks for pain levels (using the Visual Analog Scale), range of motion, and functional improvement (using the Jaw Functional Limitation Scale). Preliminary ýndings indicate that the combination of prolotherapy and occlusal braces resulted in a signiýcant reduction in pain and improvement in jaw function compared to the control group and individual treatments. The group receiving both prolotherapy and occlusal braces showed the greatest improvement in terms of pain reduction and increased range of motion. Prolotherapy alone and occlusal braces alone also demonstrated beneýts, but thSese were less pronounced compared to the combination treatment. The preliminary results suggest that the combined use of prolotherapy and occlusal braces may o er superior beneýts in managing TMJ disorders compared to single interventions or standard care. This combined approach appears to enhance pain relief and functional outcomes more e ectively. Further research with a larger sample size and longer follow-up is necessary to conýrm these ýndings and establish the long-term e cacy and safety of this combined treatment strategy.

Keywords:

Introduction

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Conclusion

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Con ict of Interest

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References

1. Mutluoglu M, Uzun G, Turhan V, Gorenek L, Ay H, et al. (2012) How reliable are cultures of specimens from superýcial swabs compared with those of deep tissue in patients with diabetic foot ulcers? J Diabetes Complications 26: 225-229.
2. Malhotra R, Chan CS, Nather A (2014) Osteomyelitis in the diabetic foot. Diabet Foot Ankle 5: 24445-24456.
3. Wagner FW (1981) The dysvascular foot: a system for diagnosis and treatment. Foot Ankle 64-122.
4. Hyslop E, McInnes IB, Woodburn J, Turner DE (2010) Foot problems in ! H q ś

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